

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alcassedan, Virginia 22313-1450 www.emplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,498	08/05/2003	Randall Woods	27593CIP	7062
33357 94/20/2011 ABBOTT MEDICAL OPTICS, INC. 1700 E. ST. ANDREW PLACE			EXAMINER	
			MATTHEWS, WILLIAM H	
SANTA ANA, CA 92705			ART UNIT	PAPER NUMBER
			3774	
			MAIL DATE	DELIVERY MODE
			04/20/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.	Applicant(s)		
10/634,498	WOODS ET AL.		
Examiner	Art Unit		
William H. Matthews (Howie)	3774		

, , , , , , , , , , , , , , , , , , , ,				
- The MAILING DATE of this communication appears on the cover sheet with the correspondence address - Period for Reply				
A SHORTENED STATUTIORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 0°F1 + 139(a). In no event, however, may a reply be timely filled.  - If NO period for reply is specified above, the maximum statisticy period will apply and will expire SIX (8) MONTHS from the mailing date of this communication.  - Failur or long within the set or extended period for reply will, by the settle contended period for reply will, by the settle contended period for reply will apply counted to reply will by the set. Set. 3 130.  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned parter to ma disjutement. See 37 0°F1 170(b).				
Status				
1) Responsive to communication(s) filed on 10 February 2011. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4) ⊠ Claim(s) 32.33.35.36-54 and 56-81 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ☒ Claim(s) 32.33.35.38-54 and 56-81 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.				
Application Papers				
9) The specification is objected to by the Examiner.  10) Redrawing(s) filed on integrate and accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)				

- Notice of References Cited (PTO-892)
   Notice of Draftsperson's -atom Drawing Review (PTO-948)
   Information Disclosure Statement(s) (PTO/SB/08)
  - Paper No(s)/Mail Date \_\_\_\_\_

- Interview Summary (PTO-413)
   Paper Nc(s)/I/ all Date. 5) Notice of Informal Patent Application
- 6) Other: \_

Art Unit: 3774

#### DETAILED ACTION

## Response to Arguments

Applicant's arguments filed 2/10/11 have been considered but are moot in view of the new grounds of rejection set forth below.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 32-33,35-36,38-54,56-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn et al. USPN 4888012 ("Horn") in view of Hanna USPN 6749634, Zadno-Azizi USPN 20030074060 ("Zadno-Azizi"), Portney USPN 7097660, and Weinschenk, III et al USPN 6599317 ("Weinschenk").

Horn disclose in figures 4-6 an intraocular lens comprising arms 84 and legs 44, collectively forming the outer body of a positioning member surrounding optic lens 12. Accommodation is achieved via external forces causing a shape and curvature of the optic to change. The optic may be formed of gel or liquid material.

Regarding claims 32,48,53, and 72-77, with respect to limitations regarding biased to the unaccommodated state in the absence of any forces, stiffer haptics, and/or a pushing/compressive force to cause accommodation via shape change of the optic, the lens of Horn is designed to be stretched to an unaccommodated state and

Art Unit: 3774

then compressive forces from the ciliary body relax the tension within haptics to allow accommodation. Since the lens haptics are tensioned in the unaccommodated state, it arguably does not provide a pushing or compressive force on the lens during accommodation (compression force from the ciliary muscles). Each of Portney and Zadno-Azizi and Weinshenk teach accommodating IOLs wherein the at-rest state of the lens is unaccommodated and the haptics directly translate a compressive force to cause accommodation. Zadno-Azizi teach haptic biasers 1000 (paragraph 0209 and figures 38C-D) which can provide a haptic with material characteristics to bias a lens in either of the accommodated or unaccommodated state as needed for a particular patient. Portney teach in Figure 18 an accommodating IOL whereby the IOL is biased to an unaccommodated state and haptics are designed to be stiffer such that they translate the compressive force from the ciliary body to an optical lens to deform it. See column 2 lines 60-66, column 11, and figure 18. Weinschenk teach an IOL biased to the unaccommodated state (Figure 2) whereupon compressive force from ciliarly muscles the IOL assumes an accommodated shape (Figure 3). Figures 4-6 are similar but utilize a force transfer assembly to translate the radially compressive force to optic. Thus the prior art show it is well known in the art to design accommodating IOLs wherein the IOL system is biased to the unaccommodated state and utilizes relatively stiff haptics to translate radially compressive forces to an optic causing a shape change in the optic. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the IOL of Horn in view of Hanna such that the optic and haptics are comprised of materials and dimensions such that the IOL is biased to an unaccommodated state

Art Unit: 3774

and utilizes relatively rigid haptic members to translate radial compressive forces of the ciliary muscle to achieve accommodation via a shape change as is well known in the art. It is further noted that applicant's specification does not suggest a particular benefit of biasing a IOL system to the accommodated or unaccommodated state (see current specification at page 20 lines 22-26 whereby Applicant acknowledges the equivalence between construction of unaccommodated and accommodated IOLs are admitted.)

With respect to claims 32, 44, 47, 48, 51, 52, 56, and 57, Horn is silent as to providing the optic between the planes, an opening anterior to the optic, an opening behind the optic, an annular portion anterior of the optic, and anterior/posterior segments located anteriorly/posteriorly of the optic. Hanna discloses an accommodating lens system for placement in the capsular bag wherein the outer body of the positioning member comprises anterior and posterior segments located anterior and posterior of the optic and comprises openings anterior and posterior of the optic such that the optic is between planes as claimed. The positioning member is shaped to conform to a capsular bag.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the positioning member of Horn to include anterior and posterior segments located anteriorly and posteriorly of the optic as taught in Hanna in order to provide the lens system with a configuration for placement in the capsular bag. Both devices are disclosed to accommodate in response to the natural eye muscle function and are considered analogous art.

Art Unit: 3774

Regarding claims 42,43 and 49, Hanna and Horn are silent as to the dimension along the optical axis and the diopter power of the lens. However, Hanna and Horn are directed to accommodating implants which are adapted to treat a wide range of patients. Therefore it would have been obvious to one of ordinary skill in the art to select the particular sizes and optical powers in order to fit a particular patients needs. Furthermore, the claimed ranges are well within ranges known in the art and would thus be a matter of obvious design choice.

Regarding claims 78-81, the optic of Horn is disclosed to include a single liquid or gel material enveloped by a single material such that the refractive index is unifom.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3774

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Matthews (Howie) whose telephone number is 571-272-4753. The examiner can normally be reached on Monday-Friday 10-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Matthews/ Primary Examiner Art Unit 3774